## REMARKS/ARGUMENTS

The arguments submitted herein incorporate the patentability arguments Applicants discussed with the Examiner during the phone interview on January 22, 2008. The Examiners found that the arguments presented to distinguish over the cited art were persuasive. The Examiners requested that the persuasive arguments be presented in a response and that the Examiner would withdraw the rejection and update his search. Applicants submit that the arguments presented herein make the substance of the phone interview of record to comply with 37 CFR 1.133. If the Examiner believes that further information on the interview needs to be made of record to comply with the requirements, Applicants request the Examiner to identify such further information.

In the Interview Summary submitted by the Examiner on January 28, 2008, the Examiner stated that Applicants "argument regarding claim 1, that the proposed amendment to claim 1 relating to virtualization controller should overcome the 102 rejection by Guha is persuasive and upon receiving the amendment prosecution will be re-opened for further search and consideration". Applicants submit that an amendment to the claims was not presented or discussed during the phone interview and that the "virtualization controller" requirement that the Examiner agreed distinguishes over the cited art is already present in claim 1, as well as the other independent claims. Thus, Applicants submit that the claims in their current form, including the "virtualization controller" requirement found in the independent claims, distinguish over the cited art for the following reasons, which the Examiner found persuasive during the phone interview.

1.  Claims 1, 3-5, 8-12, 17-19, 21-23, 25-28, 30, 31, 33-35, 38-42, and 46-69 are Patentable Over the Cited Art

The Examiner rejected claims 1, 3-5, 8-12, 17-19, 21-23, 25-28, 30, 31, 33-35, 38-42, and 46-69 as anticipated by Guha (U.S. Pub. No. 2002/0194324). Applicants traverse.

Claims 1, 19, 31, and 47 recite managing a network providing Input/Output (I/O) paths between a plurality of host systems and storage volumes in storage systems, and require: providing an application service connection definition for each of the I/O paths from a host to a storage volume; providing at least one service level guarantee definition indicating performance criteria to satisfy service requirements included in at least one service level agreement with at

least one customer for network resources; associating each service level guarantee definition with at least one application service connection definition; gathering, by a virtualization controller mapping physical storage resources to virtual volumes in a virtualization layer, Input/Output (I/O) performance data for I/O requests transmitted through the I/O paths; transmitting, by the virtualization controller, the gathered performance data to a service level agreement server; monitoring, by the service level agreement server, whether the performance data for the I/O requests transmitted through the I/O paths satisfy the performance criteria indicated in the service level guarantee definition associated with the application service connection definitions for the I/O path; and transmitting, by the service level agreement server, commands to the virtualization controller to throttle I/O transmission over at least one connection in response to determining that the performance data for at least one connection does not satisfy the performance criteria.

The Examiner cited paras. 45, 60, 62, and 69 of Guha with respect to the requirements of these claims. (Final Office Action, p. 3) Applicants traverse.

The cited para. 45 discusses a Quality of Service (QoS) enforcer that makes routing decisions to provide load balancing, based on a rule based system that associates a QoS policy, with content. Information on application servers and their loads are provided to the QoS enforcer. Cited paras. 60 and 62 discuss how a content controller uses content request information from the QoS enforcer captured at the entry point of data center to allocate or deallocate content storage. The cited para. 69 discusses how the QoS enforcer communicates with the content controller. The content controller maintains and controls metadata associated with content data. The combination of the QoS enforcer and content controller allow dynamic allocation of I/O resources based on I/O load. If the traffic increases, the content controller might create and allow access to replicate web content.

Although the cited Guha discusses how a QoS enforcer monitors performance, nowhere does the cited Guha disclose the claim requirements that a virtualization controller, which maps physical storage resources to virtual volumes, gathers I/O performance data and transmits the gathered performance data to a service level agreement server. Further, the cited Guha does not disclose that a service level agreement server transmits commands to the virtualization controller to throttle I/O transmission over the I/O paths if the performance data for the requests does not satisfy the performance criteria. Instead, the cited Guha discusses how a QoS enforcer does load

balancing and provides information to the content controller that the content controller uses to determine how to allocate I/O resources.

Further, although the cited Guha mentions that QoS enforcer sends traffic levels to the content controller, there is no disclosure that the content controller determines whether the requests sent through the QoS enforcer satisfy a performance criteria and sends commands to the QoS enforcer to throttle I/O transaction if the performance criteria is not satisfied. Instead, the cited Guha mentions that the content controller may allocate or deallocate content storage in response to request information captured by the QoS enforcer. sends commands to the

The Examiner has not cited any part of Guha that discloses the claim requirements that a virtualization controller, which maps physical storage resources to virtual volumes, gathers I/O performance data and transmits the gathered performance data to a service level agreement server. Further, the cited Guha does not disclose that a service level agreement server transmits commands to the virtualization controller to throttle I/O transmission over the I/O paths if the performance data for the requests does not satisfy the performance criteria.

During the phone interview, the Examiner agreed that the above arguments distinguish the claims over the cited Guha and that he would withdraw the rejection and update his search in view of these arguments.

Accordingly, Applicants request that the Examiner withdraw the rejection of claims 1, 19, 31, and 41.

Claims 3-5, 8-12, 17, 18, 21-23, 25-28, 30, 33-35, 38-40, 42, and 46-69 are patentable over the cited Guha because they depend from claims 1, 19, 31, and 47, which are patentable over the cited art for the reasons discussed above, and the additional requirements of these claims in combination with the base claims provide further grounds of patentability over the cited art.

1.  Claims 2, 7, 20, 24, 32, and 36 are Patentable Over the Cited Art

The Examiner rejected claims 2, 7, 20, 24, 32, and 36 as obvious (35 U.S.C. §103) over Guha in view of Bradley (U.S. Patent No. 7,082,463)

Applicants submit that these claims are patentable over the cited are because they depend from claim one of claims 1, 19, 31, and 41, which are patentable over the cited art for the reasons discussed above and the additional requirements of these claims in combination with the base and intervening claims provide further grounds of patentability over the cited art.

## Conclusion

For all the above reasons, Applicant submits that the pending claims 1-15, 17-28, and 30-49 are patentable. Should any additional fees be required beyond those paid, please charge Deposit Account No. 09-0466.

The attorney of record invites the Examiner to contact him at (310) 553-7977 if the Examiner believes such contact would advance the prosecution of the case.


Dated: February 15, 2008                    By:      /David Victor/

                                                     David W. Victor
                                                     Registration No. 39,867

Please direct all correspondences to:

David W. Victor
Konrad Raynes & Victor, LLP
315 South Beverly Drive, Ste. 210
Beverly Hills, CA 90212
Tel: (310) 553-7977
Fax: 310-556-7984